

WHAT IS CLAIMED IS:

1. A color cathode ray tube comprising:
a panel whose outer surface is substantially flat and whose inner surface has a predetermined curvature;
a funnel coupled with the panel; and
a deflection yoke installed on an outer circumference of the funnel;
wherein the panel has an aspect ratio of about 4:3 and a diagonal length USD of a viewable image size of the panel is less than about 520 mm; and
wherein

$$0.44 \leq \frac{OAH}{TOR} \leq 0.56$$

where TOR is distance between an end of the deflection yoke adjacent to the panel and a coupling surface between the panel and the funnel, and where OAH is distance between center of the outer surface of the panel and the coupling surface between the panel and the funnel.

2. The color cathode ray tube of claim 1, wherein $0.23 \leq \frac{OAH}{USD/2} \leq 0.33$.
3. The color cathode ray tube of claim 2, wherein the color cathode ray tube is used for a television.

4. The color cathode ray tube of claim 1, wherein $\frac{OAH \times 1000}{USD/2} \leq 0.456 \times USD + 106.52$.

5. The color cathode ray tube of claim 1, wherein $0.27 < \frac{OAH}{RL} < 0.39$

where RL is distance between deflection center of the deflection yoke and a coupling surface between the panel and the funnel.

6. The color cathode ray tube of claim 1, wherein $1.72 < \frac{USD}{2} \times TOR \leq 1.91$.

7. The color cathode ray tube of claim 1, wherein $1.16 < \frac{USD}{2} \times RL \leq 1.25$

where RL is distance between deflection center of the deflection yoke and a coupling surface between the panel and the funnel.

8. A color cathode ray tube comprising:

a panel whose outer surface is substantially flat and whose inner surface has a predetermined curvature;

a funnel coupled with the panel; and

a deflection yoke installed on an outer circumference of the funnel;

wherein the panel has an aspect ratio of about 4:3 and a diagonal length USD of a viewable image size of the panel is greater than or equal to about 520 mm; and

wherein

$$0.41 \leq \frac{OAH}{TOR} \leq 0.74$$

where TOR is distance between an end of the deflection yoke adjacent to the panel and a coupling surface between the panel and the funnel, and where OAH is distance between center of the outer surface of the panel and the coupling surface between the panel and the funnel.

9. The color cathode ray tube of claim 8, wherein $0.41 \leq \frac{OAH}{TOR} \leq 0.69$.
10. The color cathode ray tube of claim 8, wherein $0.23 \leq \frac{OAH}{USD/2} \leq 0.33$.
11. The color cathode ray tube of claim 10, wherein the color cathode ray tube is used for a television.
12. The color cathode ray tube of claim 8, wherein $0.35 < \frac{OAH}{RL} \leq 0.53$
where RL is distance between deflection center of the deflection yoke and a coupling surface between the panel and the funnel.
13. The color cathode ray tube of claim 8, wherein $1.94 < \frac{USD}{2} \times TOR \leq 2.21$.
14. The color cathode ray tube of claim 8, wherein $1.57 < \frac{USD}{2} \times RL \leq 1.79$
where RL is distance between deflection center of the deflection yoke and a coupling surface between the panel and the funnel.
15. A color cathode ray tube comprising:
a panel whose outer surface is substantially flat and whose inner surface has a predetermined curvature;
a funnel coupled with the panel; and
a deflection yoke installed on an outer circumference of the funnel;
wherein the panel has an aspect ratio of about 16:9; and

wherein

$$0.47 \leq \frac{OAH}{TOR} \leq 0.57$$

where TOR is distance between an end of the deflection yoke adjacent to the panel and a coupling surface between the panel and the funnel, and where OAH is distance between center of the outer surface of the panel and the coupling surface between the panel and the funnel.

16. The color cathode ray tube of claim 15, wherein $0.32 < \frac{OAH}{RL} < 0.48$

where RL is distance between deflection center of the deflection yoke and a coupling surface between the panel and the funnel.

17. The color cathode ray tube of claim 15, wherein $1.65 < \frac{USD}{2} \times TOR \leq 1.98$.

18. The color cathode ray tube of claim 15, wherein $1.49 < \frac{USD}{2} \times RL \leq 1.68$

where RL is distance between deflection center of the deflection yoke and a coupling surface between the panel and the funnel.